

REMARKS/ARGUMENTS

Claims 1-32 were pending. Claims 1, 17, and 23 have been amended, claims 33-35 have been added, and claims 6 and 22 have been canceled, without prejudice, for later filing in a continuation or other related application. Hence, claims 1-5, 7-21, and 23-35 are now pending. Reconsideration of the subject application as amended is respectfully requested.

Claims 1-6, 9-11, 13, 16-18, 20, and 22-26 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Juhasz et al., U. S. Pat. No. 5,978,405 ("Juhasz et al.") in view of ERG Materials and Aerospace Corporation 11/13/02, p. 1-3 ("ERG").

Claims 7, 8, 15, 21, and 28 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Juhasz et al. in view of ERG and further in view of the admitted prior art in this application.

Claims 12, 14, 19, and 29 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Juhasz et al. in view of ERG.

Claim 30 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Cullumber, U. S. Pat. No. 5,729,564 ("Cullumber") in view of ERG.

Claims 31 and 32 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Cullumber in view of ERG and further in view of D'Souza et al., U. S. Pat. No. 6,450,641 ("D'Souza et al.").

CLAIM REJECTIONS UNDER 35 U.S.C. § 103(a)

Independent claim 1 provides a laser apparatus that includes, *inter alia*, an elongate baffle disposed in a laser chamber and adapted to arrest a plurality of particles generated within the chamber. The elongate baffle is adapted to at least partially fill the laser chamber. Such an apparatus is neither disclosed, taught, nor suggested by the cited art Juhasz in view of ERG Materials and Aerospace Corporation (ERG).

As recognized by the Examiner, "Juhasz lacks an elongate baffle disposed in the laser chamber, the baffle adapted to arrest a plurality of particles generated within the chamber." (2/03/05 Office Action, page 2). The Examiner attempts to overcome this fatal defect by

combining Juhasz with the ERG reference. ERG discloses a duocel foam metal for use in semiconductor applications. Applicants respectfully assert that the Examiner has not established a *prima facie* case of obviousness, and that the Examiner is using impermissible hindsight to fashion the rejection. First, conventional lasers do not have large bodies disposed within the laser chamber. As detailed in the present application, "prior devices typically avoided introducing large masses or large surface area into the laser chamber." See, Application, Paragraph [0044]. Thus, Applicants respectfully assert there is no motivation or teaching in the cited art to fashion an elongate baffle from material in the ERG reference and insert that baffle into the Juhasz system. As a result, Applicants respectfully assert that independent claim 1 is in condition for allowance.

Even if there were motivation to combine the two references, which there is not, Applicants respectfully assert that the combined references still fail to disclose, teach, or suggest the subject invention of claim 1. First, ERG discusses foam metal materials for use with a completely different industry, namely, the semiconductor industry. Second, ERG only discusses using its foam metal for contamination filtration when a disk of the material is used to prevent particles from entering a process chamber. (See ERG, page 2, lines 2-4, "where the disk has served to accumulate particulate or vaporous contamination entering the diffusion chamber due to some upstream problem ... [before] passing freely into the plasma zone."). However, as required by claim 1, the elongate baffle is adapted to arrest particles that are generated within the chamber. Further, the ERG disk is not an "elongate baffle" as required by claim 1. Not only is the ERG material used in a completely different industry, but its described possible uses fail to disclose, teach, or suggest the limitations required by independent claim 1. Thus, for at least this additional reason independent claim 1 is in condition for allowance.

Claims 2-5, 7-16, and added claims 33 and 34 all depend from claim 1 and are allowable for at least this reason, as well as being allowable for the additional novel features contained therein. For example, dependent claim 12 provides first and second end baffles positioned adjacent first and second electrode structure ends. Such baffles are neither disclosed, taught, nor suggested by the cited art. Dependent claims 33 and 34 require that the elongate baffle fill a prescribed percentage of the laser chamber. As the Examiner readily admits, Juhasz

fails to disclose any elongate baffle, and thus the combination of ERG and Juhasz clearly lacks the teaching required by dependent claims 33 and 34. Thus, dependent claims 33 and 34 are allowable for at least these additional reasons.

Independent claim 17 provides a laser apparatus comprising, *inter alia*, a baffle system comprising an open-celled foam disposed in the laser chamber cavity. For at least the reasons described in conjunction with claim 1, independent claim 17 is allowable over the cited art. More specifically Juhasz fails to disclose any baffle system, and clearly fails to disclose an open-celled foam baffle system. Further, the fact ERG discusses open-celled foam does not render claim 17 obvious as there is no motivation nor teaching to combine the ERG and Juhasz references as noted above. In particular, the insertion of an open-celled foam baffle system is counterintuitive to the operation of laser systems, and the two references provide no motivation nor teaching to do so. Thus, independent claim 17 is allowable for at least this reason.

Dependent claims 18-21 and 23-25 are allowable for at least depending from an allowable independent claim 17, as well as for the additional novel features contained therein. Added dependent claim 35 is allowable for at least depending from claim 17 as well as for the novel feature contained therein; namely, the irregular nature of the open-celled foam openings.

Independent claim 26, and the dependent claims thereto, are allowable for at least one or more of the reasons previously noted. For example, the method of claim 26 requires, *inter alia*, the insertion of a baffle system into the laser chamber, with the baffle system comprising an open-celled foam. As previously noted, Juhasz in view of ERG fails to disclose, teach, or suggest the method of claim 26 without improper hindsight. Thus, independent claim 26 and claims 27-29 depending therefrom are allowable over the cited art.

Independent claim 30 provides an excimer laser comprising, *inter alia*, an open-celled metallic foam disposed in the laser chamber so as to collect particles generated in the chamber during firing of the laser. The Cullumber reference uses an electrostatic precipitator to attempt to collect dust particles generated during laser operation. In contrast, claim 30 provides an open-celled metallic foam disposed in the laser chamber to collect particles. There is no teaching in Cullumber to replace the precipitator with a foam product, nor is there any teaching in the ERG reference to use the foam product inside a laser chamber to arrest particles generated

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within that chamber. Again, as previously noted, prior devices typically avoided introducing large masses or surface area into the laser chamber, due in part to problems caused with the passivation process (See current application, paragraph 0044). Thus, independent claim 30 is allowable over the cited art. Claims 31 and 32 are allowable for at least depending from an allowable independent claim 30.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 303-571-4000.

Respectfully submitted,



Roger T. Barrett
Reg. No. 41,599

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 303-571-4000
Fax: 303-571-4321
RTB:sbm
60456680 v1